

to obtain a second image based on the result of detecting, through the second sensor, a second reflected light that is obtained by reflecting a second light emitted from the second emitting part by the second reflecting part, to obtain at least one stereoscopic image by using the first image and the second image, and to correct the at least one stereoscopic image by arranging the first image and the second image based on a location of an eye of the user obtained through the camera.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] The above and other aspects, advantages, and features of certain embodiments of the present disclosure will become apparent to those skilled in the art from the following detailed description, when taken in conjunction with the accompanying drawings in which:

[0016] FIG. 1 is a diagram illustrating an electronic device in a network environment, according to an embodiment of the present disclosure;

[0017] FIG. 2 is a block diagram illustrating an electronic device, according to an embodiment of the present disclosure;

[0018] FIG. 3 illustrates a block diagram of a program module, according to an embodiment of the present disclosure;

[0019] FIG. 4A illustrates an electronic device and an external device detachably attached to the electronic device, according to an embodiment of the present disclosure;

[0020] FIG. 4B illustrates a screen provided to a user by the electronic device and the external device illustrated in FIG. 4A, according to an embodiment of the present disclosure;

[0021] FIG. 4C illustrates a normal mode and a head-mounted (HM) mode (or VR mode) of an external device, according to an embodiment of the present disclosure;

[0022] FIG. 4D illustrates a see-through mode that an external device provides by using a rear camera of an electronic device, according to an embodiment of the present disclosure;

[0023] FIG. 4E illustrates a state in which a user wears the external device of FIG. 4A;

[0024] FIG. 5A illustrates a perspective view of a configuration of an external device, according to an embodiment of the present disclosure;

[0025] FIG. 5B illustrates a perspective view of a main frame in a state in which the external device of FIG. 5A is not coupled to an electronic device, according to an embodiment of the present disclosure;

[0026] FIG. 5C illustrates a rear perspective view of FIG. 5B in a state where an electronic device and a cover are mounted on an external device, according to an embodiment of the present disclosure;

[0027] FIG. 5D illustrates a schematic block diagram of a configuration of an external device, according to an embodiment of the present disclosure;

[0028] FIG. 6 illustrates a guide screen provided to a user to allow the user to gaze at the front, according to an embodiment of the present disclosure;

[0029] FIG. 7 illustrates images of right and left eyes of a user captured by a sensor, according to an embodiment of the present disclosure;

[0030] FIG. 8 illustrates images of right and left eyes of a user captured by a sensor, according to another embodiment of the present disclosure;

[0031] FIG. 9 illustrates images of right and left eyes of a user captured by a sensor, according to another embodiment of the present disclosure;

[0032] FIG. 10 illustrates images of right and left eyes of a user captured by a sensor, according to another embodiment of the present disclosure;

[0033] FIG. 11 illustrates images of right and left eyes of a user captured by a sensor, according to another embodiment of the present disclosure;

[0034] FIG. 12A illustrates an operation of adjusting a distance between corresponding screens which an electronic device provides to a display at the same time, according to an embodiment of the present disclosure;

[0035] FIG. 12B illustrates an operation of adjusting a distance between corresponding screens which an electronic device provides to a display at the same time, according to another embodiment of the present disclosure;

[0036] FIG. 13 illustrates a guide screen provided to a user to allow the user to track content provided on a display with his/her eye, according to an embodiment of the present disclosure;

[0037] FIG. 14 illustrates an operation in which the electronic device determines a distance between two eyes of a user based on a location of each of a left sensor and a right sensor, according to an embodiment of the present disclosure;

[0038] FIG. 15 is a flowchart illustrating a method in which an electronic device determines a user wearing state of an external device to provide a guide, according to an embodiment of the present disclosure;

[0039] FIG. 16 is a flowchart illustrating a method in which an electronic device determines a distance between eyes of a user to adjust a screen to be provided to a display, according to an embodiment of the present disclosure; and

[0040] FIG. 17 is a flowchart illustrating a method in which an electronic device determines a distance between eyes of a user to adjust a screen to be provided to a display, according to an embodiment of the present disclosure.

[0041] Throughout the drawings, it should be noted that like reference numbers are used to depict the same or similar elements, features, and structures.

DETAILED DESCRIPTION

[0042] Various embodiments of the present disclosure are described below with reference to accompanying drawings. Those of ordinary skill in the art will recognize that modification, equivalent, and/or alternative on the various embodiments described herein may be made without departing from the scope and spirit of the present disclosure. With regard to description of drawings, similar elements may be designated by similar reference numerals.

[0043] In the present disclosure, the expressions “have”, “may have”, “include”, “comprise”, “may include”, and “may comprise” indicate the existence of corresponding features (e.g., elements such as numeric values, functions, operations, or components) but do not exclude the presence of additional features.

[0044] In the present disclosure, the expressions “A or B”, “at least one of A or/and B”, and “one or more of A or/and B”, may include any and all combinations of one or more of the associated listed items. For example, the expression “A or B”, “at least one of A and B”, or “at least one of A or B” may refer to (1) where at least one A is included, (2) where